

This article was downloaded by: [185.55.64.226]

On: 08 March 2015, At: 11:18

Publisher: Taylor & Francis

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



International Journal of Occupational Safety and Ergonomics

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/tose20>

Pre-Employment Screening Among Health Care Workers—Ethical Issues

Madeleine Estryn-Behar^a

^a Service de Médecine du Travail, Hôpital Saint-Louis, AP-HP, Paris, France

Published online: 08 Jan 2015.

To cite this article: Madeleine Estryn-Behar (2015) Pre-Employment Screening Among Health Care Workers—Ethical Issues, International Journal of Occupational Safety and Ergonomics, 7:3, 351-361

To link to this article: <http://dx.doi.org/10.1080/10803548.2015.11076496>

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms & Conditions of access and use can be found at <http://www.tandfonline.com/page/terms-and-conditions>

NOTES

Pre-Employment Screening Among Health Care Workers—Ethical Issues

Madeleine Estryn-Behar

Service de Médecine du Travail, Hôpital Saint-Louis,
AP-HP, Paris, France

Occupational health practitioners deal with the questions of confidentiality, relation between the right to work and the right to health, between individual freedom and the risks other can run. An audit of pre-employment health assessment of health care workers, in the United Kingdom and in France, discussed the efficiency of pre-employment screening. Screening tests and medical examinations should not be used as a pretext to avoid implementing effective preventive measures. The pre-employment examination has mostly to be used for education of the future employees and for collection of baseline data. Appropriate procedures such as developing preventive policies, health promotion, and control of hazards in the work environment are efficient for the promotion of equal employment rights for women, older workers, or people with disabilities.

health care workers occupational health prevention screening ethics

1. SCREENING TESTS AND MEDICAL EXAMINATIONS SHOULD NOT BE USED AS A PRETEXT TO AVOID IMPLEMENTING EFFECTIVE PREVENTIVE MEASURES

In our different countries, every day, occupational health practitioners deal with the questions of confidentiality, relation between the right to work and the right to health, between individual freedom and the risks others can run.

Correspondence and requests for reprints should be sent to Madeleine Estryn-Behar, Service de Médecine du Travail, Hôpital Saint-Louis, AP-HP, 1, avenue Claude Vellefaux, 75010, Paris, France. E-mail: <estryn.belfer@jupiter.chu-stlouis.fr>.

Many questions arise in this area. To help us, the International Commission on Occupational Health (ICOH) developed a code of ethics (Jeyaratnam, 1997). It says "The determination of fitness for a given job should be based on the assessment of the health of the worker and on a good knowledge of the job demands and of the worksite."

If we look at working conditions in hospitals, as they often are, they require a very good physical condition and psychological balance. A French national survey on working conditions conducted in 1991 and 1998 (Bué & Rougerie, 1999; Cézard & Hamon-Cholet, 1999a, 1999b; Estryn-Behar, Duger, & Vinck, 2001b), shows that physical load is particularly high (Doniol-Shaw, 1996; Estryn-Behar, Duger, & Vinck, 2001a): 89% of women health workers have to stand for a long time and 77% have to carry heavy loads, which is twice as frequent as for a representative sample of all French female workers for long standing, and nearly 3 times as frequent for heavy loads (Table 1). The same study shows that night and shift work for hospital female workers is 4 to 8 times as frequent, that having to abandon a task for another one is 1.5 as frequent, and that tense situations during relations with the public is double that for the general female population (Table 2).

TABLE 1. Working Conditions of Women and Women in Health Care in France in 1991 and 1998

Declared Working Conditions	Women (%)		Women in Health Care (%)	
	1991	1998	1991	1998
Long period standing	47	49	89	89
Having to remain in uncomfortable postures	26	35	38	56
Long and frequent walking	24	30	66	74
Lifting heavy loads	24	32	69	77
Other physical strain	12	17	39	49

Notes. Source of data: Estryn-Behar, Duger, and Vinck (2001b).

From an economic point of view, it could seem logical that an occupational health practitioner selects the most productive workers from the labour market: very healthy, flexible and mobile, male workers aged 30 to 45 years. Indeed a woman with two young children is too tired to stand all day long, to handle heavy loads, to work in shifts. A woman over 40, returning to the job when her children are older or after a divorce, could

TABLE 2. Working Conditions of Women, Nursing Aides, and Nurses in France in 1991 and 1998

Declared Working Conditions	Women (%)		Nursing Aides (%)		Nurses (%)	
	1991	1998	1991	1998	1991	1998
Working more than 50 nights per year	2	3	15	19	18	26
Shift work	6	6	36	41	31	24
Having to abandon one task for another	48	56	70	74	76	73
Tense situations with the public	25	33	45	65	50	69

Notes. Source of data: Estryng-Behar, Duger, and Vinck (2001b).

also be eliminated because she would not be able to react quickly faced with difficulties with patients, or with aggression. But does the labour market offer males between 30 to 45 cleaning rooms, making patients' beds or helping patients to eat? And, when, in France, we, as occupational health practitioners, ask for early retirement for a nursing aide, in most cases, the special fund responsible for this (Caisse des dépôts et consignations) refuses to pay more years without work than usual, arguing that it is possible to find an easier work post in the hospital. In fact, the selection of the most productive workers from the labour market has social consequences. This results in an unacceptable number of people remaining unemployed and becoming dependent on social funds. In France, in 1993, one woman out of seven was unemployed and looking for employment. This was the case for one man out of ten (Bordes & Guillemot, 1994).

A screening test can be conducted, but only with the objective of preventing disease in a workforce and of confirming a person's aptitude for a certain job. Is it fair to use them as means for "selection of the fittest"? The use of screening tests and other medical examinations should not be used as a pretext to avoid implementing effective preventive measures, notably the identification and substitution of risk factors and improvements of the working conditions.

In fact, is it possible to eliminate anyone with a physical or mental illness or disability? According to the code of ethics "The occupational health practitioner has to explain necessity of public health policy, ergonomic arrangement, training for the job requirement and medical supervision, in order to attenuate, as much as possible, discriminations based on age, gender, illness or handicap, and try to maintain equal opportunity for all" (Jeyaratnam, 1997).

Braddick, Atwell, and Tar-Ching (1992) audited pre-employment health assessment in the National Health Service (NHS) of the United Kingdom. Seventeen of the 22 NHS occupational health departments in the West Midlands region replied. Departments that interviewed or examined all prospective employees tended to have higher rejection and restriction rates than departments operating a selective policy: 6 (2.6%) out of 232 versus 16 (1.4%) out of 1,140. The authors draw attention, as did the Health and Safety Executive of the United Kingdom (Health and Safety Executive, 1982), to the inefficiency of unnecessary pre-employment screening. They conclude that the time used could be used for more appropriate procedures such as developing preventive policies, health promotion, and control of hazards in the work environment.

In France, the occupational health practitioners of the 50 Parisian hospitals, linked under the same regional board examine all prospective workers. In 1992, among 14,663 pre-employment medical examinations, 247 candidates (1.68%) were rejected, and 641 (4.38%) had restrictions in their aptitude (Table 3). The results for 1999 can only be analysed for the total of medical examinations. Only 0.03% were rejected (40 definitively and 2,665 temporarily), and 0.04% had restriction in their aptitude (248 definitive and 2,983 temporary restrictions). The pre-employment examination was mostly used for education of the future employees and for collection of baseline data.

TABLE 3. Pre-Employment Screening Medical Examinations in 50 Parisian Hospitals

Pre-Employment Screening Examinations	1990	1991	1992	1999
Number of permanent hiring examinations	4,962	4,845	4,907	3,175
Number of rejections	61	98	107	
Number of restrictions	157	206	171	
Number of temporary hiring examinations	6,548	6,620	7,004	9,487
Number of rejections	30	55	134	
Number of restrictions	202	217	327	
Number of preschool entrance examinations	2,159	2,121	2,752	2,129
Number of rejections	5	8	6	
Number of restrictions	53	75	143	
Total pre-employment screening examinations	13,669	13,586	14,663	14,791
Total medical examinations				81,885
Percentage of rejections	0.70%	1.17%	1.68%	0.03%
Percentage of restrictions	3.01%	3.67%	4.38%	0.04%
				of 81,885 examinations

In the present situation, when ergonomic arrangements are not in place (Estryn-Behar, 1996, 1997a, 1997b), some kind of discrimination has to be done. Skeletal abnormalities have to be discussed regarding the physical load of the post proposed to the applicant. But it is necessary to inform every new worker of the importance of prevention through antilifting policy, and necessity of adopting good work postures. Previous mental illnesses have to be screened, and the type of vital events the new worker has recently experienced (death of parents, husband, child, etc.). But for everyone, with or without previous psychological difficulties, it is necessary that the occupational practitioner emphasises the necessity, for preventive purposes, of social and team support regarding the stress of caring. As long as compensations for night and shift work are not important, certain endocrinological problems such as diabetics have to be screened, or previous sleep and mental disorders. But shift work best compromises have to be taught at the beginning of the job and periodically repeated. Any special sensitivity to allergens has to be asked about and contact with them avoided. But principles for skin protection have to be taught, to avoid caustic reactions.

Apart from discussing the risks for a certain disease, in the context of a certain job, primary prevention through vaccination and teaching of hygiene protocols is of course a must. Vaccinations for hepatitis B or rubella, for example, have to be effective before working in contact with biological products or children. A person with low immune reactions cannot work in infectious departments or intensive care units. An applicant not cured from an infectious disease has to wait before starting the job. Hygiene protocols have to be taught to anyone working with, or for, patients. It is also necessary that the occupational health practitioner informs the candidate about protective measures linked with each particular job: anticancer drugs, anesthetic gas, ethylen oxyde, formaldehyde, X-rays, video display units, food preparation, or noise, for example.

2. OCCUPATIONAL HEALTH PROFESSIONALS MUST SERVE THE HEALTH AND SOCIAL WELL-BEING OF THE WORKERS, INDIVIDUALLY AND COLLECTIVELY

What does our code of ethics say? “The primary aim of occupational health practice is to safeguard health of workers and to promote a safe and healthy work environment. All workers should be treated in an equitable manner without any form of discrimination” (Jeyaratnam, 1997).

For example, abnormalities in colour recognition can lead to being unable to read urine multistix paper reactions in wards, or certain types of laboratory results. Errors in reading could be dramatic for the patient. But, in normal team work, a colour-blind health care worker, when clearly aware of his or her problem, could avoid these tasks, which are not the main part of the job. As another example, it is obvious that an epileptic worker cannot work alone at night, but is it normal to leave a ward to one worker?

3. INFORMATION TO THE WORKER, TO THE EMPLOYER AND DANGER TO A THIRD PARTY

The results of examinations must be explained to the worker concerned. The workers must be informed of the opportunity to challenge the conclusions. The result of the examinations must only be conveyed to management in terms of fitness for the envisaged work or of limitations necessary from a medical point of view in the assignment of tasks or in the exposure to occupational hazards.

For example, a nurse not able to read medicine labels with corrected vision cannot be accepted. But the occupational health practitioner has to be concerned by reorientation through formation or through special commissions devoted to reinsertion of people with disabilities.

4. FITNESS OF OLDER WORKERS

The case of older workers (over 40 years old) is particularly useful to discuss because ergonomic arrangement of tasks, to fit the capacities of elderly workers to the job, are the same that diminish risks for younger ones or even for pregnant women.

In fact, Europe is facing an aging workforce. In the year 2005, 33% of the workforce will be over 40 years of age (Goldberg, 1991). In French hospitals, 36.9% of the workforce were over 40 years of age in 1990, and already 43.3% in 1994 (Direction des hôpitaux, 1996). Work ability depends on the ratio of job demands and the fitness of the worker. So, the occupational health practitioner has to promote more age-conscious training and personnel policies (Goedhard, 1996). The basis for productive aging is already created in early working life. The triangle for maintaining work ability (FinnAge Action Programme) includes three groups of actions.

Actions related to work load and the physical work environment are connected with ergonomics, hygiene, and safety. Actions related to organizational structures include developmental, psychosocial, and management issues. Actions related to the individual worker are based on health promotion, in which leisure-time physical activities and also other life-style factors that improve health form the basis of the actions (Ilmarinen, 1995).

On a sample from the nursing personnel of a large medical clinic in Finland, Cremer (1996) analysed four age-groups. They showed that older workers with reduced work ability were found to be more enthusiastic than younger workers with reduced work ability. They conclude that feelings of competence are related to the subjective dimension of self-esteem.

5. FITNESS OF WOMEN

Women constitute 33.8% of the workforce in Spain, 42.5% in France, and 48% in Sweden (Marc, 1991). In France, the great change that happened during the 1980s was the fact that most women carried on working with two young children. Only 30% of women of the workforce between 25 and 29 years old have three children. But their employment, even with three children, rises up to 50% of the workforce at 40 years old (Desplanques, 1993).

The first international congress "Women, Work, Health" (1996) also asked the question in the same way: "Does the design of the work places, tools, tables and chairs take into account the ergonomics, that is, the differences among individuals? ... The present state of scientific knowledge allows us to affirm that women show the consequences of stress sooner than men do, because they suffer disorders in their reproductive life, disorders in their menstrual cycle, or give birth to children of low weight sooner than men suffer a heart attack. The toxicity of environmental pollution also have lower thresholds for producing disorders in women than in men; the toxicity last longer in women because they have more fat tissue" (Valls-Llobet, 1996). Women's mortality is lower than men's mortality, but women's morbidity is higher, as their way of living and social position are very different (Saurel-Cubizolles & Blondel, 1996).

For some, both workers and managerial staff, the solution was to try to employ more male workers in hospitals. But in most countries health care workers remain 80% female. The debate around equal employment opportunities for women and men has contributed to an improvement in the

working conditions of both sexes in those countries where it has developed. Rather than barring women from hazardous jobs, the application of this principle aims at the reduction of job-related hazards for all workers.

6. FITNESS OF PERSONS WITH AN ILLNESS OR DISABILITY

In accordance with the international code of ethics (Jeyaratnam, 1997), French legislation (Labour Code, article R 241-48 and legislation of July 12, 1990) says that no one can be eliminated, except for medical incapability expressed by the occupational health practitioner, because of his or her state of health or disability. Every public or private enterprise, employing more than 20 workers, has to employ 6% of persons with disabilities (legislation of July 10, 1987 in favor of the employment of handicapped people).

As far as HIV is concerned, some ethical problems can, and must, be discussed. According to the European Council (Conclusions of the Council, 1989), if the serological status is not known, systematic research of anti-HIV antibodies is not relevant. However, during medical examination, signs of AIDS, or the person's request, may lead to biological tests. These tests must never be done without the person's knowledge. If the serological status is known, it is necessary to distinguish between the serological status and the clinical status. Positivity for HIV, alone, cannot justify disqualification for health care work. If the serological status coexists with clinical signs of AIDS, employment has to be discussed in special medical committees and restrictions can be specified.

The example of HIV seropositivity illustrates the fact that screening to prevent a future lack of adaptation, when the applicant is fit for a given job at the time of the medical examination, is contrary to the ethics of our profession. A fat person, a woman with varicose veins or inequality of the legs, a person with a corrected visual defect in one eye only, a patient who has completed cancer treatment, and so forth, cannot be disqualified to protect the employer's future productivity. But the occupational health practitioner has to inform the candidate about the need to choose the kind of job he or she will be able to continue longest if his or her health problem becomes worse.

And a prohibited job for a worker with a certain disease is not for ever. Prohibition has to be adapted constantly to take account of technical developments. For example, a known allergy to penicillin no longer

prevents nursing professions, as the administration of medicines no longer involves, in most cases, inhalation or skin contact with penicillin.

7. CONCLUSION

A framework for judging the acceptability of screening for susceptibility has been settled by Van Damme et al. (1995) within the Biomedical and Health Research Programme of the European Union. An open discussion about the use of pre-employment screening should cover points that reflect scientific, social, and ethical questions and that relate to the relevance, the accuracy, the need for, and the consequences of a test.

We must insist upon the following questions regarding relevance and achievability of measures taken to eliminate risky exposure in the workplace: Have all measures that are reasonably and technically possible been taken to substitute or eliminate the hazard and to improve conditions at work? To what degree can measures reduce the risk? To what degree should economic or socioeconomic considerations be included?

The occupational health and safety professional's role is to guide these processes based on expert knowledge of the workplace, the guarantee of a healthy work situation and ergonomics, studies of the interaction of the worker and the work involved. Ethics forbid a selection aiming at increasing productivity.

REFERENCES

- Bué, J., & Rougerie, C. (1999). L'organisation des horaires—Un état des lieux en mars 1998 [Organization of working hours—the state for March 1998]. *Premières Synthèses* (No. 99.07, 30.1). Paris, France: Ministère de l'Emploi et de la Solidarité.
- Braddick, M.R., Atwell, C.P., & Tar-Ching, A. (1992). Audit of pre-employment health assessment in the National Health Service. *Occupational Medicine*, 42(1), 36–38.
- Bordes, M., & Guillemot, D. (1994). Marché du travail [Labour market] (Séries longues). *INSEE Résultats, Emploi-Revenus*, 62–63.
- Cézar, M., & Hamon-Cholet, S. (1999a). Efforts et risques au travail en 1998 [Effort and risk in work in 1998]. *Premières Synthèses* (No. 99.04, 16.1). Paris, France: Ministère de l'Emploi et de la Solidarité.
- Cézar, M., & Hamon-Cholet, S. (1999b). Travail et charge mentale [Work and mental load]. *Premières Synthèses* (No. 99.04, 27.1). Paris, France: Ministère de l'Emploi et de la Solidarité.

- Conclusions of the Council and the Ministers for Health of the Member States, meeting within the Council, on 15 December 1988 concerning AIDS and the place of work. *Official Journal of the European Communities*, No. C 028, February 3, 1989, pp. 1–3.
- Cremer, R. (1996). Work ability of nurses in relation to age. In W.J.A. Goedhard & ICOH Scientific Committee “Aging and Work” (Eds.), *Aging and work 3* (pp. 49–58). The Hague, The Netherlands: Pasmans Offsetdrukkerij.
- Desplanques, G. (1993). Activité féminine et vie familiale [Women’s activity and family life]. *Economie et Statistiques*, 261, 23–32.
- Direction des hôpitaux. (1996). *Informations sur les ressources humaines à l’hôpital* [Information about human resources in hospital], 9. Paris, France: Ministère du travail et des affaires sociales.
- Doniol-Shaw, G. (1996). El empleo y las condiciones de trabajo de las mujeres en Francia en el sector de servicios [Employment and working conditions of women in France in the service sector]. In *First international congress “Women, Work, Health,” Barcelona, Spain* (pp. 213–222). Madrid, Spain: Ministerio de Trabajo y Asuntos Sociales, Instituto de la Mujer.
- Estryn-Behar, M. (1996). *Ergonomie hospitalière théorie et pratique* [Hospital ergonomics, theory and practice]. Paris, France: ESTEM.
- Estryn-Behar, M. (1997a). Ergonomics and health care. In J.M. Stellman (Ed.), *Encyclopaedia of occupational health and safety* (4th ed., pp. 97.13–97.26). Geneva, Switzerland: International Labour Office.
- Estryn-Behar, M. (1997b). Ergonomics of the physical work environment. In J.M. Stellman (Ed.), *Encyclopaedia of occupational health and safety* (4th ed., pp. 97.29–97.33). Geneva, Switzerland: International Labour Office.
- Estryn-Behar, M., Duger, N., & Vinck, L. (2001a). *Evolution des conditions de travail des femmes à l’hôpital à la lumière de plusieurs enquêtes* [Women health care workers—Evolution of working conditions according to several national studies in France]. Manuscript submitted for publication.
- Estryn-Behar, M., Duger, N., & Vinck, L. (2001b). Les conditions de travail des femmes à l’hôpital ont-elles changé entre 1984 et 1998? [Women’s working conditions in hospital, did they change between 1984 and 1998?]. *Revue Française d’Epidémiologie et Santé Publique*, 49(4), 397–400.
- Goedhard, W.J.A., & ICOH Scientific Committee “Aging and Work” (Eds.). (1996). *Aging and work 3*. The Hague, The Netherlands: Pasmans Offsetdrukkerij.
- Goldberg, A. (1991). *Ageing of the working population and employment* (Working Paper No. WP/91/10/EN). Dublin, Ireland: European Foundation for the Improvement of Living and Working Conditions.
- Health and Safety Executive (HSE). (1982). HSE advice against unnecessary pre-employment health screening. *Health and Safety Information Bulletin*, 81, 8–9.
- Ilmarinen, J. (1995). A new concept for productive aging at work. In E. Heikkinen, J. Kuusinen, & I. Ruoppila (Eds.), *Preparation for aging* (pp. 215–222). New York, NY, USA: Plenum Press.
- Jeyaratnam, J. (Ed.). (1997). *International code of ethics for occupational health professionals* (4th ed.). Singapore, Republic of Singapore: National University Hospital, Department of Community, Occupational & Family Medicine.

- Marc, G. (1991). Les femmes aujourd'hui [Women today]. *INSEE Première*, 160, 1–4.
- Saurel-Cubizolles, M.J., & Blondel, B. (1996). *La santé des femmes* [Women's health]. Paris, France: Flammarion Médecine-Sciences.
- Valls-Llobet, C. (1996). [Presentation]. In *First international congress "Women, Work, Health," Barcelona, Spain* (pp. 7–9). Madrid, Spain: Ministerio de Trabajo y Asuntos Sociales, Instituto de la Mujer.
- Van Damme, K., Casteleyn, L., Helseltine, E., Huici, A., Sorsa, M., Van Larebeke, N., & Vineis, P. (1995). Individual susceptibility and prevention of occupational diseases: Scientific and ethical issues. *Journal of Occupational and Environmental Medicine*, 37(1), 91–99.